

EXTERNAL-MOUNTING OPTION
CAPACITOR UNIT FOR 2000msec RIDE-THRU
P/N 50179403 (230V)
P/N 50179404 (460V)

DESCRIPTION

The standard 1, 2, or 3HP GPD 503 has a momentary power failure (input undervoltage) ride-thru of 0.2 seconds (200 milliseconds). The addition of this capacitor unit extends ride-thru duration to 2 seconds (2000 milliseconds).

RECEIVING

All equipment is tested against defect at the factory. Report any damages or shortages evident when the equipment is received to the commercial carrier who transported the equipment.

INSTALLATION AND WIRING

WARNING

HAZARDOUS VOLTAGE CAN CAUSE SEVERE INJURY OR DEATH. LOCK ALL POWER SOURCES FEEDING DRIVE IN "OFF" POSITION.

1. Turn off all electrical power to the GPD 503 drive.

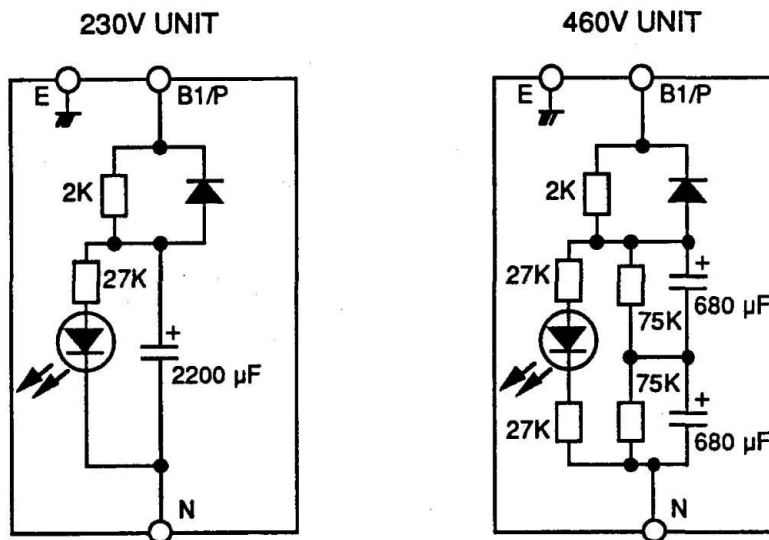


Figure 1. Internal Circuit of Capacitor Unit

CHANGE RECORD			

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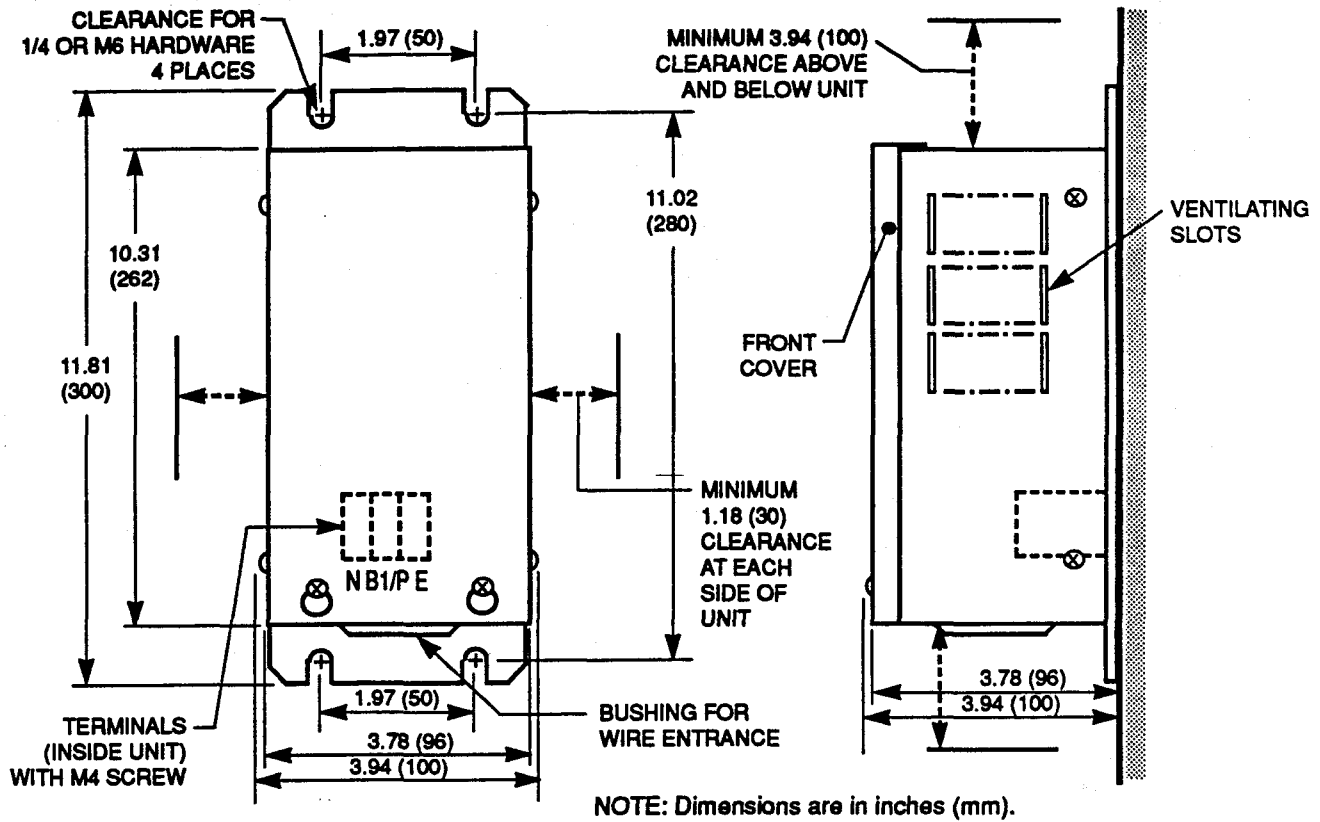


Figure 2. Capacitor Unit Dimensions

Table 1. Capacitor Unit Specifications

	230V Unit	460V Unit
Voltage Input	243 to 400VDC	460 to 800VDC
Charging Time Constant	$\tau \approx 4.5$ sec	$\tau \approx 0.7$ sec
Charge Display	"CHARGE" lamp in unit (duplicating "CHARGE" lamp on GPD 503's Digital Operator) remains on until DC Bus voltage drops below 50V.	
Environmental Conditions	Protected from corrosive gasses, dirt or dust	
Storage Temp Range	-20° to 60°C (-4° to 140°F)	
Operating Temp Range	-10° to 50°C (14° to 122°F)	
Operating Humidity	90% max relative (no condensation)	
Vibration	1G at frequency less than 20Hz; 0.2G at 20 to 50Hz	
Approximate Weight	4.4 lb (2 kg)	

Refer to Sheet 1 for latest change.

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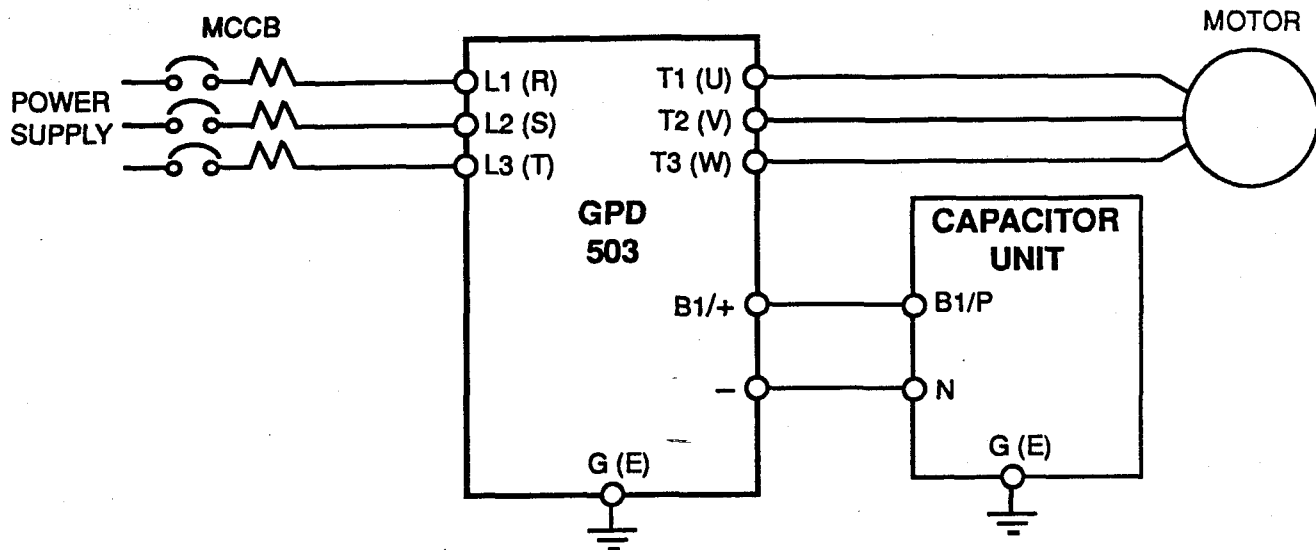


Figure 3. Wiring of Capacitor Unit and GPD 503

2. Verify that the "CHARGE" lamp is out. Then loosen screws and remove drive front cover.
3. Locate a position on the wall or panel close to the GPD 503 for mounting of the capacitor unit. Note clearance requirements given in Figure 2. Using Figure 2 as reference for hole spacing, drill and tap four holes (1/4 or M6) for mounting screws.
4. Install two lower sets of hardware (screws with flat and lock washers), and position the capacitor unit. Install the two top sets and tighten all hardware.
5. Loosen two securing screws, then push up and lift off the capacitor unit front cover.

NOTE

If the capacitor unit is being mounted inside an enclosure, it may be desired to have it operate as an open-chassis unit; in that case, remove four attaching screws and remove the capacitor unit's enclosure skirt at this time.

6. Refer to Figure 3 and complete wire connections from the capacitor unit to the GPD 503. Use wire 14 AWG (2mm²) or larger.
7. Reinstall and secure the cover of the GPD 503, and (if skirt has not been removed) reinstall and secure front cover of capacitor unit.

GPD 503 Programming Requirements

8. Program Sn-11 third digit (X X X) to 1 to select continuous operation at momentary power loss.
9. Program Cn-37 to any value up to 2.00 seconds.

This completes installation of this option.

